

Title: Dynamic Weighted Sum Multi-Criteria Decision Making: Mathematical Model

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Abstract: Multi-criteria decision making is a sub discipline of operations research that explicitly considers multiple criteria in decision making problems. Several methods have been proposed for solving multi-criteria decision making problems (MCDM). The weighted sum method (WSM) is the best known and simplest multi-criteria decision making method for evaluating a number of alternatives in terms of a number of decision criteria. The current Weighted Sum Method helps the decision maker to choose when the scenario is static. However, the time consideration is another significant factor that influences decisions. In this study, a mathematical model is presented for a Dynamic Weighted Sum Method (DWSM). Moreover, optional applications of DWSN are discussed.